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ABSTRACT

This paper reviews recent developments in the growth of testing as a requirement for high school graduation for K-12 public school systems throughout the United States. It then examines performance patterns on such tests by focusing on results for students indifferent racial and ethnic groups in several states. The multiple meanings of the movement to require students to pass formal statewide tests in order to receive a high school diploma are considered. Twenty-two states currently have such requirements, and an additional five states are developing examinations that will be required for high school graduation. There is little consensus about the impact of high stakes testing on students, teachers, schools, and the general public's perception of education. Without considering the ultimate impact of such tests, this paper reviews the immediate impact by examining the test scores of students from different racial and ethnic groups in Texas, New York, and Minnesota. For each state, the history of state graduation testing, current regulations about exemptions from the tests, racial and ethnic group performance differences, and legal challenges to high school graduation tests are reviewed. If the motivational consequences of high school graduation tests are not positive or at least not uniformly positive cross racial, ethnic, and social class lines, as some research has suggested, then these tests may have the potential to exacerbate further substantial inequities in schooling outcomes. Whatever the interpretation one prefers to place on the high stakes testing movement, there are things that can be done to improve the use of such tests. These center around research into test construction and test use to ensure equal opportunity. (Contains 17 references.) (SLD)

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The Development and Impact of High Stakes Testing

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The Development and Impact of High Stakes Testing

Throughout the twentieth century the use of formal standardized testing has grown in the United States and permeated most major sectors of life. From the use of such tests to classify personnel for the armed forces and regulate immigration early in the century (Kamin, 1974), to the application of testing and assessment in schools and colleges (Lemann, 1995a, 1995b) and workplaces (Wigdor and Garner, 1982) as the century unfolded, to the institutionalization of widespread testing as government policy in more recent years (Broadfoot, 1996; Hansen, 1994), there has been an unprecedented expansion of the use of testing technology. Indeed, formal testing has become the kudzu of modern American society, a healthy vigorous grower penetrating all available space.

In the last quarter of the twentieth century testing has developed as a major tool of policy makers for the governance and regulation of education. Beginning in the seventies with the growth of the minimal competency testing movement, numerous states turned to the widespread use of formal testing of students as a mechanism to place a performance floor under the educational enterprise. With the development of the contemporary school reform movement following the release of *A Nation at Risk* in 1983, widespread standardized testing, increasingly connected to consequences beyond the test report alone, became a staple of educational policy makers in their quest to raise and maintain high standards. Such standards and the testing practices thought to signify and support them have enjoyed continued currency among both members of the educational policy establishment and leaders of the broader political order in the nineties as an element of a systemic reform movement which seeks to align curriculum, standards, and assessments to achieve a powerful impact on the educational system. Finally, the information on student performance made available through widespread testing, if not the technology of testing itself, has been incorporated into the arguments of school finance reform advocates who point to the poor patterns of performance among students in certain groups and locations as evidence to support claims that certain public schools, typically those serving urban and minority youngsters, are inadequate to meet the needs of the students they are supposed to provide with genuine educational opportunities.

In this paper we first review the recent developments in the growth of testing as a requirement for high school graduation for K-12 public school systems throughout the United States. We then examine the performance patterns on such tests for students in different racial/ethnic groups by focusing on several states for in-depth consideration. Finally, we consider the multiple meanings of the movement to require students to pass formal statewide tests in order to receive a high school diploma.

The Growth of Widespread Testing in K-12 Education

Formal testing of students in K-12 schools has enjoyed popularity among policy makers for several decades because it is viewed as addressing a number of goals. Programs of formal testing controlled by state government agencies allow the level of government with the legal authority for schooling, the state, to exercise control over the activities of the local schools and districts where schooling actually occurs. As such formal state testing programs can be a part of

the monitoring process used by states to insure that appropriate educational activities are occurring, and, along with funding and regulation, are one of the key methods of enacting state influence. In an educational system that is among the most decentralized in the world, such devices are particularly attractive to state leaders whenever they feel pressure from the citizenry to maintain and enhance the quality of education.

Statewide formal testing of students has the potential to influence the behavior of all major actors in the educational system. Testing can be interpreted as causing students to pay greater attention to the demands of the educational system and devoting greater effort in meeting those demands. Testing may also be viewed as a mechanism to influence the behavior of professional educators, teachers and administrators by exposing the results of their performance to public scrutiny in a comparative framework. Finally, testing may be seen as a device to influence the way the public perceives public schools. Particularly when testing is attached to the award of the high school diploma, it may be viewed as a way to guarantee to the public some basic level of accomplishment for high school graduates. Indeed, it may be the goal of offering quality assurances to the public that most clearly motivates high stakes testing.

Another appeal of widespread testing to the policy community is the inherent efficiency of testing as a performance monitoring process. Testing of student outcomes offers a more favorable ratio of information gathered to expenses incurred than most other supervision strategies. Formal testing programs attempt to arrive at assessments regarding performance based upon severely limited samples of performance under restricted contexts. Moreover, such testing programs carry the mantle of science and are thereby legitimated. Finally, testing programs can be portrayed both as monitoring devices and as educational reforms themselves and thus do not lead, at least initially, to substantial new expenditures for additional changes in the system.

All of these factors suggest that there are compelling reasons why policy makers, oriented toward the exercise of rational measures to improve school bureacracies look favorably on widespread testing programs. In addition to the reasons given thus far for the rapid expansion of widespread formal testing tied to meaningful sanctions such as the granting of a high school diploma, there may be powerful social forces leading to the adoption of such systems. In light of the rise of testing technology in the early part of the twentieth century and its use to respond to and control the perceived threat posed by massive immigration and the possible displacement of advantaged classes in American society (Kamin, 1974), it is at least worth considering whether the current boom in testing is more than coincidentially arising in the wake of both the civil rights movement which liberated million of American blacks from strong social restrictions on their advancement in society and the massive movement of new immigrants into the U.S. over the last twenty years. Thus, the current testing boom may be viewed both as an attempt to control the educational bureaucracies and to slow the rate at which new groups enter positions of power and influence in U.S. society.

Whatever the cause or causes, there is no denying the broad use of formal testing tied to high school graduation. The Council of Chief State School Officers (1998) indicates that 22 states

currently have examinations required for high school graduation.[1] An additional 5 states are in the process of developing examinations that will be required for high school graduation.[2] The Education Commission of the States (1997) reports that three states offer endorsed diplomas to students who not only pass an exit test, but score at a level higher than the minimum required for a regular diploma.[3] The same report also notes that three states offer honors diplomas to students who pass a more rigorous test.[4] These reports are, however, moving targets, as state-level policies regarding graduation tests can shift rapidly.

Impact of High Stakes Testing

There is little consensus on the impact of high stakes testing on students, teachers, schools, and the general public's perspective on education. Proponents of high stakes testing argue that such tests will alert parents and the public to the performance of individual students and the system overall. These proponents suggest that such tests will cause students to devote greater effort to their schooling and that they will also orient schools to the goals for education adopted at the state level. Indeed, there is some evidence that formal state testing programs do influence the activities of teachers and school administrators by directing their attention to a curriculum linked to the tests (Wilson and Rossman, 1993; Firestone, Goertz, and Natriello, 1997).

Opponents of high stakes testing policies argue that such policies, and indeed the entire standards movement, is based on faulty assumptions regarding human motivation, Sheldon and Biddle (1998) argue that rigid standards, narrow accountability, and tangible sanctions may reduce the motivation of teachers and students. They note that students who are focused on tests and sanctions may lose intrinsic interest, learn only superficially, and fail to develop a desire for learning. In addition, they observe that reforms that include standards, accountability, and sanctions may raise test scores while impeding our progress toward creating a population of life-long learners who can adapt to changing needs and conditions.

As Heubert and Hauser (1998) note, proponents and opponents of graduation testing can argue about the issue precisely because we have relatively little research that addresses the consequences of such testing. Without pressing the issue of the ultimate impact of high stakes testing, in the next section we consider the immediate impact in terms of the test scores of students from different racial and ethnic groups in Texas, New York, and Minnesota, three of the twenty-two states currently involved in high stakes testing programs. For each state, we briefly describe the history leading up to the current high stakes testing program. We then consider the current regulations regarding exemptions from the tests, which in some states serve as a "safety valve" regulating the proportion of students who are likely to fail these tests. We then document racial and ethnic group disparities in performance on recent administrations of the tests. We conclude our discussion of each state by reviewing past and proposed legal challenges to the testing program that are grounded in racial/ethnic group disparities in pass rates.

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[1] Alabama, Florida, Georgia, Hawaii, Indiana, Louisana, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio, South Carolina, Tennessee, Texas, Virginia, West Virginia

[2] Alaska, Illinois, Maine, Oregon, Pennsylvania

[3] Michigan, New York, Tennessee

[4] New York, Ohio, Tennessee

High Stakes Graduation Testing in Texas

Introduction. In the late 1980's, Texas' legislature mandated a new criterion-referenced testing program, dubbed the Texas Assessment of Academic Skills (TAAS). The tests are used to gauge individual students' academic progress, and to evaluate the performance of schools and districts for statewide accountability purposes.

There are two ways of completing the testing requirements for a high school diploma in Texas. The first is to pass all three parts (reading, mathematics and writing) of the exit-level TAAS. The exit-level TAAS is administered initially in the spring of the 10th grade, and in the spring, summer, and fall of each subsequent school year. Students thus have eight opportunities to pass each part of the exit-level TAAS. The TAAS is also administered in grades 3 through 8, and the State Board of Education has set the level of satisfactory performance so that the passing standard in reading and mathematics in grades 3 through 8 is equivalent to the passing standard at the exit-level (i.e., approximately 70% of the items correct).

The second way of satisfying the testing requirement is to pass end-of-course tests in Algebra I, English II, and either Biology or U.S. History. The end-of-course tests are administered in the last two weeks of the course, and students who fail to attain a passing score can retake the test each time it is offered. It is not possible to satisfy the testing requirement by mixing scores on the exit-level TAAS and the end-of-course tests.

Exemptions. Students receiving special education services may be exempted from the TAAS and end-of-course tests on the recommendation of their admission, review, and dismissal (ARD) committee, if the committee determines that these tests are not appropriate measures of the student's academic progress. An exempt special education student who successfully completes an approved individualized education plan (IEP) can receive a high school diploma. Students with learning disabilities such as dyslexia who are not exempt from testing by virtue of their special education status may be eligible for testing accommodations. Although students of limited English proficiency may be exempted from the TAAS assessments in grades 3 through 8 on the recommendation of the student's language proficiency assessment committee (LPAC), there is no such exemption for the exit-level TAAS or end-of-course tests. A limited English proficient student who has entered the U.S. within 12 months of the initial administration of the exit-level tests may postpone the initial administration once, but subsequently is subject to the usual testing requirements.

The Texas Education Agency reports the proportion of students not tested across all of the TAAS tests (i.e., grades 3 through 8 and the exit-level). In 1997, 9.4% of the students eligible for participation in the TAAS testing program were not tested. African American and Hispanic students were much less likely to be tested than white students. Of the 11.6% of the African American students who were not tested, more than 80% were exempted by their ARD committees. Of the 13.8% of the Hispanic students who were not tested, approximately 40% were exempt due to limited English proficiency, and an additional 40% were exempted by their ARD committees. (As noted above, limited English proficiency is not a legitimate exemption for

the exit-level tests.) In contrast, only 5.2% of the white students were not tested, and nearly 80% of these were exempted by their ARD committees.

Racial/ethnic disparities in performance. There are substantial differences across racial/ethnic groups in performance on the tests required to obtain a high school diploma in Texas. Table 1 shows the pass rates for several such tests administered in the 1998-99 school year: the TAAS exit-level tests in reading, mathematics and writing, administered in the spring of 1999, and the end-of-course tests for Algebra I and Biology I, administered in the fall of 1998. These results pertain to students not enrolled in special education, and include both first-time test-takers as well as students retaking the test. In every case, the pass rate for white students greatly exceeds that for African American and Hispanic students. These gaps have, however, shrunk slightly over time, as the pass rates of all groups increased markedly from 1994 to 1999.

Table 1. 1998-99 TAAS Pass Rates by Student Race/Ethnicity, All Students Not in Special Education

	TAAS Reading	TAAS Mathematics	TAAS Writing	End-of-Course Algebra I	End-of-Course Biology I
White	97%	91%	97%	52%	92%
African American	85	69	88	20	64
Hispanic	82	75	86	26	67

Perhaps more revealing are the TAAS exit-level cumulative pass rates. These rates is the percent of students who first took the exit-level TAAS test in the spring of their 10th-grade year, and who successfully completed all three parts of the exit-level TAAS by the spring of their senior year of high school. Table 2 shows the TAAS exit-level cumulative pass rates for the classes of 1996 through 1998. The results reported in Table 2 show that, by the spring of their senior year in high school, a substantial fraction of minority students -- more than one-sixth -- have not successfully completed the TAAS exit-level tests required to obtain a Texas high school diploma. In contrast, fewer than one in ten white students in the classes of 1996 through 1998 had failed to complete the exit-level TAAS successfully. Although the increasing cumulative pass rates from 1996 to 1998 are encouraging, the overall impression is that these tests are, and will remain for some time, an impediment to the graduation prospects of African American and Hispanic youth.

Table 2. Cumulative Pass Rates on the TAAS for the Classes of 1996-1998, by Race/Ethnicity

	Total	White	African American	Hispanic
Class of 1996	84.7%	91.7%	76.0%	76.2%
Class of 1997	86.6	92.7	78.9	79.3
Class of 1998	88.7	93.9	82.4	82.6

Legal challenges. In December, 1995 the Texas branch of the National Association for the Advancement of Colored People (NAACP) filed a complaint with the Office for Civil Rights in the U.S. Department of Education (OCR), alleging that the group disparities in performance on the exit-level TAAS is evidence that the test discriminates against minority youths. In 1997, OCR determined that the complaint did not warrant a finding of racial bias.

The Mexican American Legal Defense and Educational Fund (MALDEF) filed a suit in a federal district court against the Texas Education Agency in October, 1997 on behalf of seven students who did not pass the TAAS exit-level test. The case was scheduled to be heard in March, 1999. MALDEF's press release on the suit states that "[a]pproximately 7,500 students each year do not pass the TAAS test and are denied a diploma...Over half of Texas' minority students in the sophomore year do not pass one or more parts of the TAAS test, and approximately 85% of the students who do not pass the TAAS in May before graduation are Mexican American or African American."

High Stakes Graduation Testing in New York

Introduction. The New York State Board of Regents has adopted new more demanding standards for high school graduation. The adoption of these new Regents' graduation standards did not occur in isolation. Rather it is part of a broader movement of educational reform guided at the state level by policies to develop, articulate, and raise standards for schools and students and to promote the adherence to those standards by means of more comprehensive and more challenging assessments. Darling-Hammond & Falk (1997) describe the New York effort, begun in the early 1990's under Commissioner Thomas Sobol and continued by current Commissioner Richard Mills, as "a comprehensive system of learning goals and standards, curriculum frameworks, new assessments, and support strategies..."

New York has long been involved in the statewide testing of student performance. In one sense the state has a great deal of experience in such testing that might prove useful in its current endeavor. However, the approach to assessment reflected in the new Regents' graduation requirements is a major departure from past practices in several ways.

First, although high school graduation in New York state has long involved state exams, the state has operated a dual track system. The current requirements for graduation were developed in the early 1980s as part of the Regents Action Plan. Students seeking a local high school diploma have been required to pass Regents Competency Tests, relatively low demand assessments, and the corresponding course units of study. Only students seeking a Regents diploma have been required to pass a minimum of eight of the more demanding Regents Examinations and course units of study (New York State Education Department, 1995). The result of this assessment policy has been the development of two quite different curricular tracks through high school with local diploma students involved in less challenging classes preparing for less challenging examinations and students pursuing a Regents diploma taking more demanding Regents courses preparing for more demanding examinations. The new graduation requirements will still maintain the distinction between the local diploma and the Regents diploma, but all students will have the opportunity to earn a Regents-endorsed diploma by earning a passing score of 65 on the Regents examinations. Students who do not earn a passing score of 65 on the Regents examinations may receive a local diploma if they meet a lower standard on the same examination. Standards for the local diploma will be set by the local district, but can be no lower than 55 (New York State Education Department, 1996d). Curricular arrangements designed to allow students to succeed on the new Regents' examinations will be decided at the local level; the state department of education is encouraging districts to provide appropriate instruction for

students who learn in different ways and at different paces while not locking any students into tracks with lower expectations (New York State Education Department, 1996e). Thus the new policy calls for a single set of standards toward which all students should work with the means to reaching those standards to be determined locally.

Second, the new graduation requirements and assessments are tied less to particular courses and more to comprehensive state standards. In each curricular area the state has adopted learning standards to guide both the development of curriculum at various grade levels and the development of statewide assessments. These standards include connections between grade levels and across subject areas.

Third, the new graduation requirements envision the continual revision of the Regents examinations to bring them into line with state and national standards and practices for assessment. These revised assessments are intended to include more than content coverage; they will also probe higher-order thinking and require a broader range of activities from students. Hence, the current Regents Examinations, although certainly more demanding than the Regents Competency Tests, may not be as demanding as the revised Regents Examinations. Thus, an analysis which compares the RCT's to the current Regents Examinations or one that examines current pass rates on the Regents Examinations may underestimate the extent of the change required to prepare students to succeed on the revised Regents Examinations.

The requirements for a high school diploma in New York state will be substantially changed by the new examination requirements. This change will occur over several years as students are required to pass the Regents Examinations in various fields instead of the current Regents Competency Tests.

The schedule for implementing the new testing standards is as follows:

Year	Requirement for Entering Ninth Graders
1996	Take the English Regents exam
1997	Take the English and Mathematics Regents Exams
1998	Take the English, Mathematics, and Social Studies Regents exams
1999	Take the English, Mathematics, Social Studies, and Science Regents exams
2000	Achieve a score of 65 or above on the exams in English and Social Studies
2001	Achieve a score of 65 or above in English, Social Studies, Mathematics and Science

Exemptions. Students with disabilities typically have legally-mandated individualized education programs (IEPs) or 504 plans, named after Section 504 of the Rehabilitation Act of 1973, a civil rights statute requiring that persons with disabilities be provided services that are as effective as those provided non-disabled persons. Students identified as Section 504 eligible need to be provided with services so they can participate fully in a regular classroom or basic program. Exemptions are allowed both for students with short-term disabilities and for those whose IEP or 504 Plan contains test modification provisions (New York State Department of Education, 1996). Modifications in testing procedures may be made at the discretion of the principal for students with short-term disabililities who do not have an IEP or 504 Plan, but a full report must be made to the Office of State Assessment and if a student is expected to continue to need test

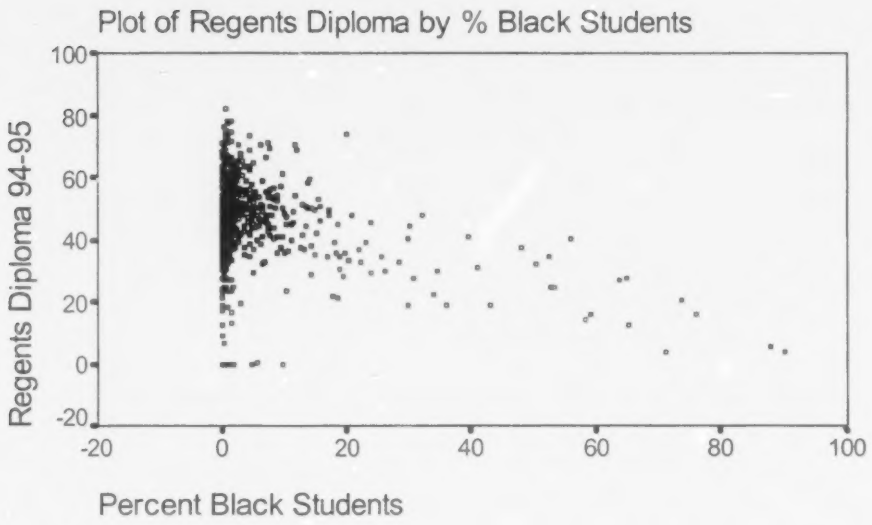
modifications, a referral must be made for the development of an IEP or 504 Plan. Modifications for students with short-term disabilities may include extending the time for the test, administering the test in a special location, recording the answers in any manner, and (except for tests of reading comprehension) reading the test to the student.

For students whose IEP or 504 Plan includes test modifications principals must provide modified testing procedures, including reading or signing questions to students, recording student answers in an alternative manner, the use of spell checkers and grammar checkers or excusing students with severe spelling disabilities from spelling requirements. Large-type examinations, Braille examinations, and reader-administered examinations may also be provided where appropriate.

Racial/Ethnic Disparities in Performance. Because the new Regents examinations have not been widely administered and because data on prior Regents examination results have not been available by racial/ethnic group membership, we are only able to consider possible racial/ethnic disparities in performance by examining school-level Regents pass rates in relationship to school-level student body characteristics.

To ascertain the relationship between student background and performance on the Regents Examination Program we examined data from the Statistical Profiles of Public School Districts (New York State Education Department, 1997d). This report contains data on the proportions of students receiving Regents diplomas in 1994-95 and the proportions of racial and ethnic minority students in each school. The correlation between the proportion of Regents diplomas and the proportion of Black students in a school is -.33. Figure 1 below shows that, although there is a wide distribution of the proportion of Regents diplomas among schools with fewer than 20% Black students, among schools in which Black students constitute more than 50% of the student body, the proportion of Regents diplomas remains below 40%.

Figure1



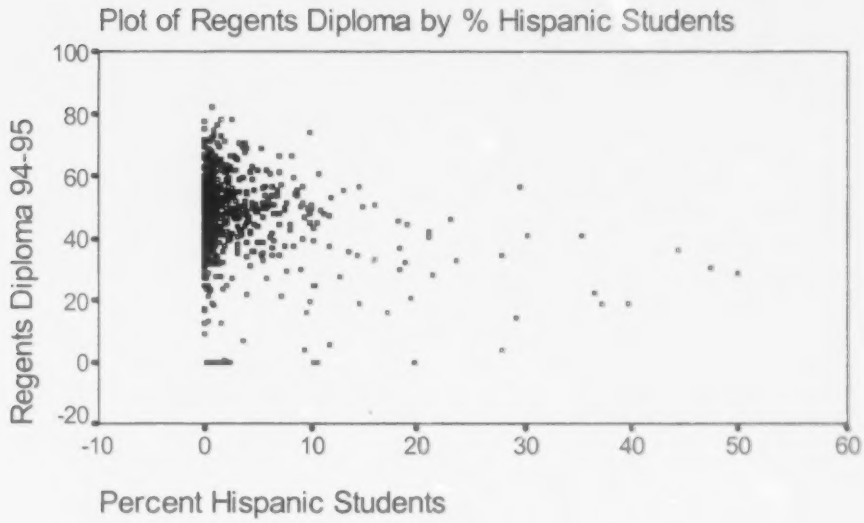
This negative relationship between the proportion of Black students in a school and the proportion of Regents diplomas awarded is reflected in the correlations involving the proportions of students passing individual Regents exams reported in Table 3.

Table 3. Correlations Between the Proportion of Black Students in a School and the Proportion of Students Passing Individual Regents Examinations

Regents Exam	r	N	Regents Exam	r	N
English	-.28	690	**Chemistry**	-.25	679
Math I	-.33	685	**Earth Science**	-.32	531
Math II	-.31	692	**Physics**	-.21	665
Math III	-.27	680	**US History**	-.27	693
Biology	-.33	665	**Global Studies**	-.33	676

A parallel set of analyses were conducted using the proportion of Hispanic students in a school. The correlation between the proportion of Regents diplomas and the proportion of Hispanic students in a school is -.22. Figure 2, which plots this relationship, shows that, although there is a wide distribution of Regents diploma rates among schools with fewer than 15% Hispanic students, among schools with more than 15% Hispanic students the Regents diploma rate remains below 60%. When the proportion of Hispanic students exceeds 40%, the Regents diploma rate remains below 40%.

Figure 2



The negative relationship between the proportion of Hispanic students in a school and the proportion of Regents diplomas awarded is reflected in the correlations involving the proportions of students passing individual Regents examinations as noted in Table 4.

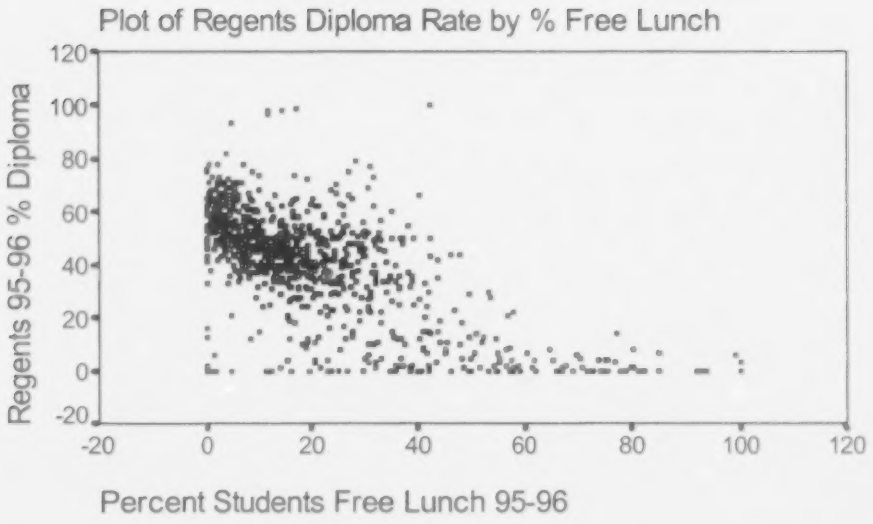
Table 4. Correlations Between the Proportion of Hispanic Students in a School and the Proportion of Students Passing Individual Regents Examinations

Regents Exam	r	N	Regents Exam	r	N
English	-.22	690	**Chemistry**	-.15	679
Math I	-.24	685	**Earth Science**	-.23	531
Math II	-.16	692	**Physics**	-.12	665
Math III	-.16	680	**US History**	-.19	693
Biology	-.25	665	**Global Studies**	-.23	676

These analyses involving the racial and ethnic minority status of students show that there is a negative relationship between the proportion of minority students in a school and the proportion of Regents diplomas awarded in a school. The negative relationship is stronger in the case of Black students than in the case of Hispanic students, but even for Hispanic students the relationship is significant and extends across all of the individual Regents examinations.

To determine the relationship between performance on the Regents examinations and student family resources, we examined the relationship between the school rates for the awarding of Regents diplomas and the school rates for participation in the free lunch program. The correlation between these two school-level measures is -.62, indicating that as the percentage of students participating in the free lunch program increases, the percentage of students earning a Regents diploma decreases. Figure 3 shows this relationship quite clearly.

Figure 3

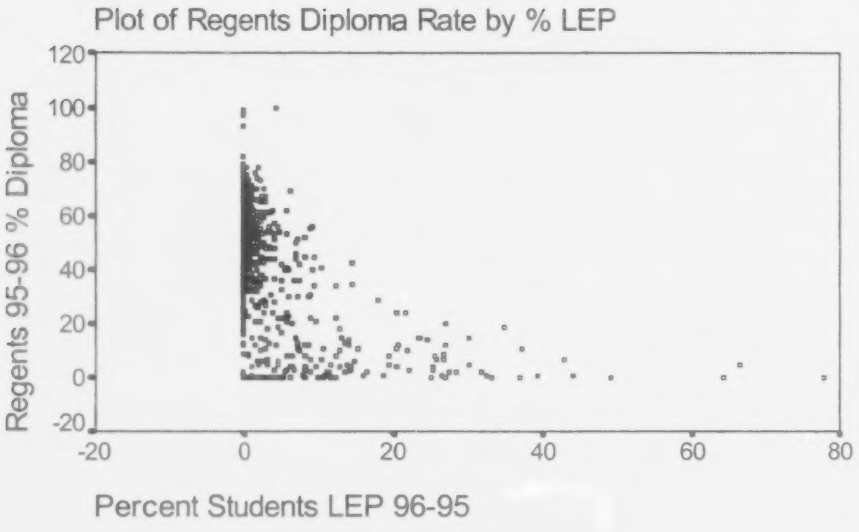


As Figure 3 reveals, in schools in which half or more of the students participate in the free and reduced price lunch program, fewer than 35% of the students earn a Regents diploma. Among schools in which fewer than half of the students participate in the free and reduced price lunch program, the variation in the Regents diploma rate is much greater.

We also examined the relationship between the percentage of students awarded a Regents diploma in a school and the percentage of the student body classified as limited English proficient.[5] The correlation between these two school level measures is -.45, indicating that as the percentage of limited English proficient students in a school increases, the Regents diploma rate decreases. Again, Figure 4 shows this relationship quite clearly.

[5] Here we are treating limited English proficiency as an exogenous factor reflecting student background, rather than as an endogenous factor reflecting school effectiveness.

Figure 4



Clearly, the burden of responding to the change represented by the new standards will not fall on schools evenly. Schools which educate greater proportions of poor and limited English proficient students will face the greatest challenge in moving toward an all Regents program. Even in the absence of pass rates for particular minority groups, these data clearly indicate that the new Regents Standards with have a disparate impact on racial and ethnic minorities, the poor, and students with limited English proficiency.

Legal challenges. With the new Regents Standards and examinations not yet in effect, there are no active legal challenges to the testing program. However, attorneys for the Committee for Fiscal Equity who are challenging the constitutionality of the state educational finance system plan to incorporate the new Regents Standards and examinations into arguments relating to the need for additional resources to provide a sound basic education in numerous districts statewide. Other advocacy groups have indicated an interest in the performance of students with disabilities and those who have Limited English Proficiency.

High Stakes Graduation Testing in Minnesota

Introduction. Minnesota's new graduation standards have two elements, basic standards defining the basic skills needed to live and work in contemporary society and high standards defining what a student should know, understand, and be able to do to demonstrate a high level of achievement. To satisfy the basic standards students must pass tests in reading and mathematics first administered in the eighth grade and a test in written composition first administered in the tenth grade. Students from the class of 2002 and beyond must pass these tests to graduate. To satisfy the high standards students must accomplish 24 of 48 possible standards in ten learning areas by completing performance packages, sets of locally designed assignments, in ten learning areas. Students from the class of 2002 and beyond must complete 24 standards to graduate. In addition the state has a set of tests administered to students in the third and fifth grades. These

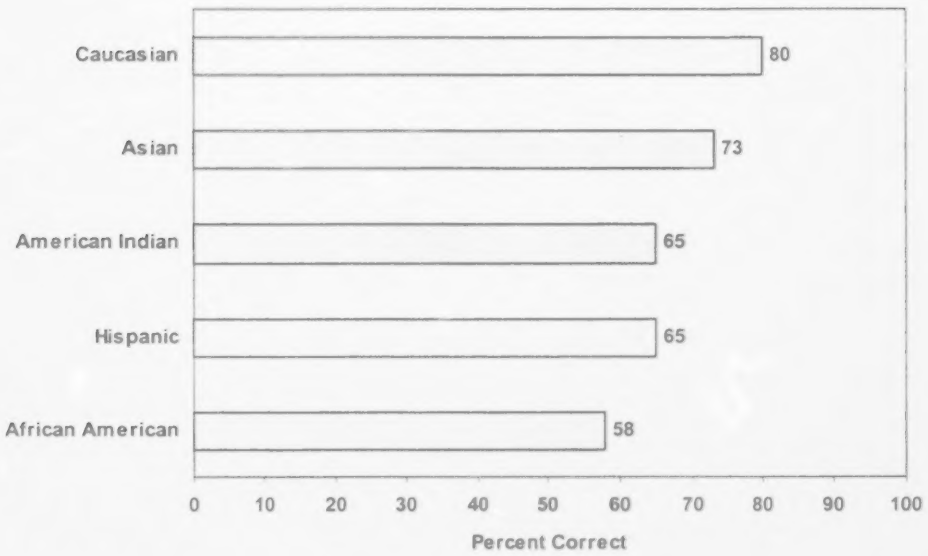
Minnesota Comprehensive Assessments are administered in reading and math in third grade and in reading, math, and written composition in fifth grade.

Exemptions. There are exceptions to the standard testing procedures for both students with disabilities and LEP students. Students with disabilities are eligible for accommodations or modifications as called for in their IEPs or 504 plans. An accommodation involves the same test or assignment administered with a variation in time, format, setting and/or presentation manner. An example would be a blind student taking a Braille version of a test. A modification is an adjustment in the test or assignment that involves a change in the standard for a particular student. An example would be a student completing work on only part of a standard. For students who pass the Basic Standards tests with or without accomodations the transcript will show the notation "Pass-State"; for students with IEPs or 504 plans who pass modified versions the transcript will indicate "Pass-Individual." Student may be exempted from the tests if their cognitive ability is limited to the extent of prohibiting them from taking the test, if taking the test would be detrimental to the student beyond a reasonable level of stress or anxiety, or if the student's IEP or 504 plan did not expose them to the material coverd by the test. (Minnesota Department of Children, Families, and Learning, 1998a).

Each local school district is responsible for establishing a process to determine how Limited English Proficient (LEP) students are to be included in Basic Standards Testing. LEP students are identified as those "whose first language is not English and whose test performance may be negatively impacted by lack of English language proficiency." (Minnesota Department of Families, Children, and Learning (1998b). Students can be temporarily exempted from the tests only if they have spent less than three years in a school where the primary language of instruction is English. Accomodations for LEP students can include adjustment in the time, location, and presentation format of the test. Districts can also determine the conditions under which students may take a translated or interpreted version of the Mathematics Test or the Test of Written Composition. The notation "Pass-Translate" will be recorded on the records of students who pass a translated test. For the Test of Written Composition, local districts determine how a student or parent can request to have a composition reviewed to be eligible for a designation of "Pass-LEP" signifying that the composition, although written in English, meets a different standard. The Reading Test may not be translated.

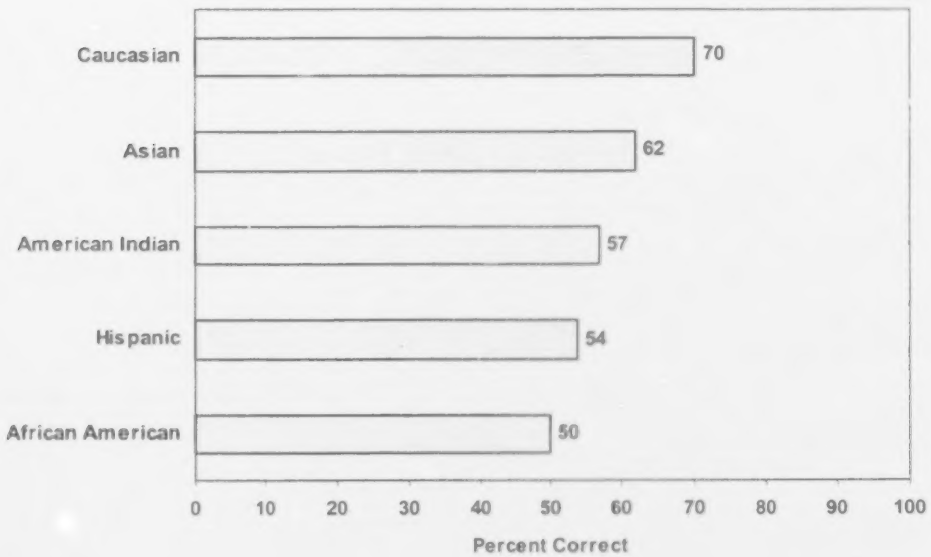
Racial/ethnic disparities in performance. The first statewide administration of the Minnesota Basic Standards tests took place in 1996. Analyses of this data by researchers at the Roy Wilkins Center at the University of Minnesota revealed substantial differences in the test outcomes for students from different racial/ethnic groups (Roy Wilkins Center, 1997). Students in all minority groups performed less well on the test than majority students. As Figure 5 indicates, white students averaged 80 percent correct on the math, Asian American students scored 73 percent correct, Native American and Hispanic students scored 65 percent correct, and African-American students scored 58 percent correct.

Figure 5. Math Scores for Minnesota Eighth Graders by Race/Ethnicity



For the reading test the pattern was much the same. There white students average 70 percent correct, Asian students scored 62 percent correct, Native American students scored 57 percent correct, Hispanic students scored 54 percent correct, and African-American students scored 50 percent correct. Figure 6 displays these differences.

Figure 6. Reading Scores for Minnesota Eighth Graders by Race/Ethnicity



Legal challenges. With Minnesota's new graduation standards yet to take effect fully, there are no on-going legal cases pertaining to them. However, the results of the new state tests are likely to be used by lawyers for the St. Paul Public Schools in their case against the State of Minnesota challenging the adequacy of state funding.

Interpretations

Interpretations of the purpose and disparate impact of high stakes testing are heavily dependent upon the perspective brought to the question. If we accept the assumptions regarding the positive motivational consequences of high stakes testing on parents, students, teachers, and school administrators, then we can take comfort in the fact that policies which mandate challenging high stakes testing for all students may in fact extend educational opportunities more broadly than earlier practices which divided students into different educational tracks with different levels of quality and challenge and different educational and occupational trajectories. If we accept the legitimacy of high stakes tests as devices which appropriately measure student performance and the effort which necessarily precedes that performance, then we can be satisfied that we are creating a system which justly rewards those who work hard to develop their talents. If managers of state educational systems employ high stakes tests as only one element of a broader rational examination of the processes, opportunities, and outcomes of schooling and if they configure such systems to provide to all students processes and opportunities sufficient to lead to desired and mandated outcomes well in advance of the testing events, then we can view such tests as appropriate management tools. If advocates for the provision of equitable and adequate schooling resources for all students can use the results of high stakes tests to reveal deficiencies in the current arrangements for the education of all children, including less advantaged children, then we can be encouraged that such tests will have an ameliorative impact on what is arguably the least equitable educational system among modern nation states.

There is, however, an equally plausible set of assumptions which is less satisfying to contemplate. If the motivational consequences of high stakes tests are not positive or at least not uniformly positive across racial, ethnic, and social class lines, then we should be concerned about their potential to further exacerbate already substantial inequities in schooling outcomes. Claude Steele's research, which shows that the threat of conforming to race-based stereotypes about academic ability may depress the academic performance of racial and ethnic minorities, suggests precisely this possibility. If we have reason to question the legitimacy of current testing technologies to support the purposes to which they are being put, then we should be concerned that the "science" of testing and measurement is once again being abused to justify and achieve social purposes that would otherwise be indefensible. If managers of state educational systems deploy high stakes tests in isolation from more comprehensive efforts to provide adequate and equitable educational resources, then we should question the true intent of such testing programs. If defenders of the current arrangements for schooling rely on the results of high stakes tests to define any and all patterns of educational deficits as originating and residing in the backgrounds and individual capacities of students alone, then we should be concerned that these tests will be used to justify the maintenance of an educational system which only appears to provide fundamental educational rights while denying those rights in defiance of state and federal constitutional provisions.

Recommendations

Whatever interpretation one prefers to place on the high stakes testing movement, there are a number of things that we can do to improve the use of such tests to enhance the educational rights of U.S. students. First, we can develop programs of research to allow us to understand more fully the consequences of high stakes testing, and indeed assessment processes more generally on individuals and their performance. Second, we can explore more aggressively the capacity of high stakes and other tests and assessments to reflect the full range of human capabilities. Third, we can continue to expand our conceptions of human capacity beyond those typically captured in mainstream tests. Fourth, we can continue to hold proponents of the rationality of high stakes testing accountable for applying a correspondingly vigorious rational analysis to the educational processes and opportunities necessary to insure student success on those tests. Finally, we can continue to use the results of high stakes tests to reflect back on the system its obligations to provide equal opportunity for learning, in effect making the stakes for policy makers no less high than we make them for 18 year old high school students.

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